



Advocacy Department

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April 5, 2012

Kathleen Baskin, P.E.  
Director of Water Policy  
Executive Office of Energy and Environmental Affairs  
100 Cambridge Street, 9th floor  
Boston, MA 02114

Re: **SWMI Framework comments**

Via Email: **[kathleen.baskin@state.ma.us](mailto:kathleen.baskin@state.ma.us)**

Dear Ms. Baskin:

Mass Audubon offers the following comments on the draft Sustainable Water Management Initiative (SWMI) Framework issued by the Executive Office of Energy and Environmental Affairs (EEA) on February 3, 2012. We are grateful to EEA for convening this process following the Department of Environmental Protection's (DEP) clarification statement on Safe Yield in November, 2009, which stated that DEP's "interpretation of the term safe yield under the Water Management Act includes environmental protection factors, including ecological health of river systems, as well as hydrologic factors."

I appreciate the opportunity to have served on the SWMI Advisory Committee over the past two and a half years. The extensive work by the agencies and stakeholders is laudable, and much progress has been made. In particular, the US Geological Survey (USGS) peer-reviewed technical report and associated streamflow classification system derived from that analysis are a major step forward in linking the best available science to policy and regulation. We are also encouraged by the interagency discussion and cooperation that has stemmed from the SWMI process, and we encourage EEA to continue to support further collaborations among DEP, the Department of Fish and Game, and the Department of Conservation and Recreation as the Framework is tested through piloting and regulations are developed, promulgated, and implemented.

Further work remains to be done to improve the connection between the stream Flow Levels and a Safe Yield methodology that is fully consistent with the science and DEP's 2009 commitment. We recommend that the permit review and conditioning provisions be more firmly linked to quantifiable measures to maintain the health of streams in Flow Levels 1-3 and to restore those in categories 4-5 over the 20-year period of Water Management Act (WMA) permits issued going forward. Mass Audubon recommends that EEA and DEP focus on clarifying and improving those aspects of the Framework as you move into the next phase of pilot projects and

regulatory drafting. We appreciate the progress made to date, and encourage you to continue to build upon the scientific basis established thus far.

### **Massachusetts Water Resources and Impacts**

Massachusetts is fortunate to have extensive water resources that support both people and a diverse array of fish and wildlife. Our state receives abundant annual precipitation, yet our rivers, streams, wetlands, and aquifers are under stresses from many quarters: water withdrawals, impervious surfaces, stormwater, undersized culverts, dams, etc. Sensitive aquatic species such as the brook trout are already greatly diminished from historic ranges and populations due to these impacts. It is likely that climate change will alter precipitation patterns, causing increased frequencies of both droughts and flooding events, further impacting both human infrastructure and aquatic life. It is important that steps be taken on multiple fronts to reduce the impact of these stressors.

There is no doubt that water withdrawals impact rivers and associated wetlands – that is clear not only in the Ipswich River basin but also many others. Summertime pumping of water from wells hydrologically connected to rivers, or lack of discharge from surface water reservoirs, can and does result in severely degraded aquatic habitat and some streams drying up entirely. Approximately twenty percent of subbasins statewide are substantially or severely stressed by reduced flows. Several of these areas include Mass Audubon properties and those of other private and public conservation landowners, where the land around rivers and wetlands is protected from development but nevertheless impacted by water withdrawals.

### **Role of Conservation and Efficiency**

Mass Audubon has been involved in water allocation policy for decades. During this time, there has been substantial progress in water conservation and efficiency, even while thorny issues such as Safe Yield under the WMA have continued. In the mid-1980s, we successfully opposed the proposed diversion of the Connecticut River into the Quabbin Reservoir, and supported conservation and efficiency as viable alternatives. The Massachusetts Water Resources Authority system has succeeded in reducing demand well below the most ambitious projections made at that time. Significant potential remains for further progress on water conservation and efficiency across the state. The fact that other human-induced changes such as impervious surfaces also impact these water resources should not deter the Commonwealth from adopting an improved approach to water withdrawal permitting under the WMA. Issues of the revenue effects of water conservation can be addressed through revised rate structures and other techniques. Conservation of existing supplies frees up water both to restore flows to rivers and to meet the needs of economic growth. Water efficiency is cost-effective, particularly when compared to the high costs of developing new supplies to meet growth and development needs.

### **Water Management Integration and Mitigation of Withdrawal Impacts**

Other regulatory and voluntary measures such as initiatives to improve stormwater management and stream connectivity can and should be simultaneously pursued to address other water resource impacts. At the same time, it is beneficial for EEA and its agencies to identify

opportunities to break down the silos among water resource management issues, and to incorporate reasonable provisions within the WMA permit framework for water withdrawals to be mitigated by actions in other arenas (e.g. stormwater infiltration and dam removal projects). Mass Audubon supports inclusion of innovative approaches to mitigation in the SWMI permitting Framework. It is important, however, that the benefits of such techniques be measurable and in proportion to the withdrawal impacts they are intended to address.

### **Safe Yield, Mitigation and Permit Benchmarks for Restoration in Flow Levels 4 and 5**

The definition of Safe Yield is important, as it is the only factor under the WMA that sets a clear upper limit on withdrawals. All of the other factors to be considered under permitting are a matter of balancing. While balancing human and environmental needs in permit decisions is valid, the backstop provided by Safe Yield is also essential. As noted in previous comments during the SWMI process, a Safe Yield that is based on the major basins and averaged over the course of a year does not provide the protection for the ecological health of rivers that DEP promised going into this process. We understand the difficulty in dealing with areas where water has been overallocated in past permitting decisions. The solution is not to adopt a Safe Yield that is ineffective and inconsistent with the SWMI goals of protecting flows in healthy streams and restoring flow depleted streams. Rather, there should be strong ties among the Safe Yield and stream Flow Levels portions of the Framework, with a path to restoration of flows in Flow Level 4 and 5 subbasins over the course of the next 20 years of permits.

Mass Audubon supports the needs of communities to provide a continuing, safe, and adequate source of water for residents and businesses. That can be accomplished while still setting clear goals and measurable benchmarks for progress toward restoration of depleted streams over the next two decades. The permit framework contains some qualitative language that hints at the possibilities to minimize and mitigate impacts affecting Flow Level 4 and 5 subbasins. More needs to be done in the final Framework and regulations to firm up the goals and benchmarks and establish clear expectations that will result in effective, fair, and consistent permitting along with real and measurable restoration progress.

### **Registrations**

The Supreme Judicial Court decision on registrations allows DEP to develop regulations regarding conditioning of the use of registration volumes. Several Mass Audubon properties (e.g. Ipswich River, Stump Brook) are among the locations directly impacted by registered withdrawals. We urge DEP to include conditioning of registrations within the updated WMA regulations, in a manner consistent with the SJC decision and not impinging on the rights of registration holders to utilized registered volumes.

### **Other Issues**

Several commenters have raised valid concerns regarding other aspects of the proposed Framework, including baseline, anti-backsliding provisions, consistency with Water Quality Standards and pollution prevention regulations, redundant wells, definitions of offsets and mitigation, nonessential water restriction trigger points and requirements, return flow credits, and enforcement. We encourage EEA and DEP to consider all comments carefully, and in particular to respond to technical issues raised by the Conservation Law Foundation, The Nature Conservancy, Massachusetts Rivers Alliance, Ipswich River Watershed Association, and other of

our colleagues that have submitted carefully thought out technical analyses. Mass Audubon also recognizes that water suppliers have real and valid questions and concerns regarding how the new system will work in relation to the need for them to provide safe, reliable, and affordable sources of water. We believe those issues are resolvable, and we encourage EEA to continue to work to define a new WMA permit regulatory system that will meet the water needs of both people and nature.

### **Conclusion**

Mass Audubon supports the SWMI process and encourages EEA and its agencies to continue to move forward with refining the Framework, conducting pilots, and crafting regulations. The science that has been presented in the SWMI process is a major advancement, and the streamflow classification system provides a sound foundation for moving forward.

Thank you again for your efforts, and for considering these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "John J. Clarke".

John J. Clarke  
Director of Public Policy & Government Relations

Cc: Ken Kimmell, Commissioner, Department of Environmental Protection  
Mary Griffin, Commissioner, Department of Fish and Game  
Conservation Law Foundation  
The Nature Conservancy  
Massachusetts Rivers Alliance  
Ipswich River Watershed Association

*Protecting the Nature of Massachusetts*